



In re Application of:

DRUMM, et al.

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Confirmation No. 9864

Serial No. 10/511.657

Group Art Unit: 1635

Filed: April 18, 2005

Examiner: Wollenberger, Louis V.

For: MEANS AND METHODS FOR THE SPECIFIC MODULATION OF TARGET GENES IN THE CNS AND THE EYE AND METHODS FOR THEIR IDENTIFICATION

Date Mailed: May 31, 2007

I HEREBY CERTIFY THAT THIS SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE VIA FIRST CLASS MAIL UNDER 37 CFR 1.8 AND IS ADDRESSED TO MAIL STOP AMENDMENT, COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450

Kathleen Pujol

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Documents Mailed: Information Disclosure Statement (2 pages) Form PTO-1449 (2 pages) References Cited (35) Certificate of Mailing Postcard

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

The undersigned asserts that each item of information contained in the information disclosure statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement.



AUTHORIZATION

No fee is required. The Commissioner is hereby authorized to charge any additional fees which may be required for this submission, or credit any overpayment to Deposit Account No. 50-0436.

Respectfully submitted,

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Facsimile: (412) 281-0717 Date: May 31, 2007



Complete if Known Substitute for form 1449/PTO Application Number 10/511.657 INFORMATION DISCLOSURE Filing Date April 18, 2005 STATEMENT BY APPLICANT First Named Inventor Drumm Group Art Unit 1635 (use as many sheets as necessary) Examiner Name Wollenberger, Louis V. Sheet 1 of 2 Attorney Docket Number 129402 00201 U.S. PATENT DOCUMENTS Evaminer's Cite U.S. Patent Document Name of Patentee or Applicant Date of Pages, Columns, Lines, Initials No. of Cited Document Publication of Where Relevant Passages or Cited Document Relevant Figures Appear Kind Code Number MM-DD-YYYY (if known) 2002/0054902 A1 05-09-2002 A1 Pardridge Eppstein et al. 5.550.289 08-27-1996 A FOREIGN PATENT DOCUMENTS Name of Patentee or Applicant Foreign Patent Document niner's Cite Date of Pages, Columns, Lines, tials of Cited Document Publication of Where Relevant Cited Document Passages or Relevant Office Number Kind Code MM-DD-YYYY Figures Appear (if known) В1 WO 98/48009 A2 University of Florida 10-29-1998 Rhone-Poulenc Rorer S.A D-Pharm Ltd. B2 WO 94/08026 A1 04-14-1994 02/11666 В3 WO A2 02-14-2002 B4 wo 99/12572 A1 University of Florida 03-18-1999 B5 Necleonics, Inc. et al. 1229134 A2 08-07-2002 B6 wo 01/83729 Α Novartis AG 11-08-2001 В7 01/36646 Cancer Res. Campaign Tech 05-25-2001 WΩ 00/44914 Medical College of Georgia 08-03-2000 Research Institute B9 WO 02/088320 A University of Florida 11-07-2002 OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc. Exami Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, Initials No. magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or county where published. C1 CARLSON et al., Perineurium in the Drosophila embryo and its role in the blood-brain/nerve barrier, 1998, Int. J. Insect Morphology and Embryology 27(2):61-66 BANKS et al., Delivery across the blood-brain barrier of antisense directed against Amyloid beta; reversal of learning and memory deficits in mice overexpressing Amyloid precursor protein, 2001, J. Pharmacology and Experimental Therapeutics 297(3):1113-1121 C3 PARDRIDGE et al., Vector-mediated delivery of a polymamide ("peptide") mucleic acid analogue through the blood-brain barrier in vivo, 1995, Proc. Nat. Acad. Sci. USA 92:5592-5596 C4 BOADO et al.. Drug delivery of antisense molecules to the brain for treatment of Alzheimer's disease and cerebral AIDS, 1998, J. Pharm. Sci. 87(11):1308-1315 C.5 TYLER et al., Peptide nucleic acids targeted to the neurotensin receptor and administered i.p. cross the bloodbrain barrier and specifically reduce gene expression, 1999, Proc. Natl. Acad. Sci. USA 96:7053-7058 LEE et al., Imaging gene expression in the brain in vivo in a transgenic mouse model of Huntington's disease C6 with an antisense adiopharmaceutical and drug-targeting technology, 2002, J. Nuclear Medicine 43(7):948-958 PENICHET et al., An antibody-Avidin fusion protein specific for the Transferrin Receptor serves as a delivery, ex C7 J. Immun. 163:4421-4426 C8 WU et al., Pharmacokinetics and blood-brain barrier transport of [3H]-biotinylated phosphorothicate oligodeaoxynucleotide conjugated to a vector-mediated drug delivery system, 1996, J. Pharm, Exp. Ther, and Am. Soc. Pharm. 276(1):206-211 Examiner Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



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Substitute for form 1449/PTO					Application Number		10/511,657		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)						Filing Date		April 18, 2005 Drumm 1635	
						First Named In	ventor		
						Group Art Unit			
						Examiner Name	9	Wollenberger, Louis V	
Sheet		2	of		2	Attorney Docke	t Number	129402.00201	
/L.W./	C9	SHI et al., Antisense imaging of gene expression in the brain in vivo, 2000, Proc. Natl. Acad. Sci. USA 97(26):14709-14714							
	C10	BOADO, Antisense drug delivery through the blood-brain barrier, 1995, Adv. Drug Delivery Reviews 15(1/3):73- 107							
1	C11	PINEDA et al., The genetic network of prototypic planarian eye regeneration is Pax6 independent, 2002, Development 129:1423-1434							
	C12	DRYJA et a	ORYJA et al., Mutations in the gene encoding the alpha subunit of the rod cGMP-gated channel in autosomal ecessive relinitis pigmentosa, 1995, Proc. Natl. Acad. Sci. USA 92:10177-10181						
	C13 HUNT et al., Vitreous treatment of retinal pigment epithelial cells results in decreased expression of 1998, Investigative Ophthalmology & Visual Sci. 39(11):2111-2120							expression of FGF-2.	
C14 KOCIOK et al., Vitreous treatment of cultured human RPE cells results in differential expression of genes, 2002, Investigative Ophthalmology & Visual Sci. 43(7):2474-2480							expression of 10 new .		
C15 CAMPOCHIARO, Gene therapy for retinal and choroidal disease 2(5):537-544								ion on Biological Therapy,	
	C16 KCCIOK et al., Upregulation of RAS-GTPase Activating Protein (GAP)-Binding Protein (G388P) RP Ecells, 1999, J. Cellular Biochemistry 74:194-201 C17 CHAN et al., Expression of chemokine receptors, CXCR4 and CXCR5, and chemokines, BLC all control of the cont							n (G38BP) in proliferating	
								es, BLC and SDF-1, in the	
	C18		/GEROPOULOS et al., New treatment strategies for malignant gliomas, 1999, The Oncologist 4:209-224						
	C19	GROOTHUIS, The blood-brain and blood-tumor barriers: a review of strategies for increasing drug delivery, 2000, Neuro-Oncology 2:45-59							
	C20	PARDRIDGE, Brain drug targeting and gene technologies, 2001, Japanese J. Pharmacology 87:97-103							
C21 PARDRIEGE, Drug and gene targeting to the brain with molecular Trojan horses, 2002, N 139							2, Nature Reviews 1:131-		
	C22 QIAN et al., Targeted drug delivery via the Transferrin Receptor mediated endocytosis pathway, 20 Pharmacological Reviews 54(4):561-587								
	C23	PARDRIDGE, Vector-Mediated drug delivery to the brain, 1999, Advanced Drug Delivery Reviews, 36(2-3):299-321							
	C24	PARDRIDGE, CNS drug design based onprinciples of blood-brain barrier transport, 1998, J. Neurochemistry 70:1781-1792							
	C25								
V	C26	PHILIP et al., Polarized expression of monocarboxylate transporters in human retinal pigment epithelium and ARPE-19 cells, 2003, Investigative Ophthalmology & Visual Sci. 44(4):1716-1721							
xaminer ignature		/Louis Wol	llenberge	er/		Date Considered	01/	14/2008	

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